

**Claims**

1. Method for determining a perceived quality indicator for end-to-end data transfer in a wireless data network (1), comprising measuring at least one system performance indicator during transfer of a predefined data type specimen, and  
5 calculating the perceived quality indicator for said predefined data transfer type and for at least one other data transfer type from said measurement.
2. Method according to claim 1, in which the at least one system  
10 performance indicator comprises at least one lower network layer performance indicator further comprising  
measuring at least one other lower network layer performance indicator  
and  
mapping the at least one other lower network layer performance  
15 indicator to the perceived quality indicator.
3. Method according to claim 2, in which the mapping is a linear mapping, e.g. a linear two-dimensional mapping.
- 20 4. Method according to claim 2 or 3, in which the at least one lower network layer performance indicator is a modified lower network layer performance indicator.
5. Method according to claim 4, in which integer values of the at least  
25 one lower network layer performance indicator are mapped to real values.
6. Method according to one of the claims 1 through 5, in which the at least one lower network layer performance indicator is the throughput speed, and the quality indicator is derived from the measured throughput speed using  
30 a moving window averaging estimation, in which the size of the moving window

corresponds to the at least one other data transfer type.

7. Method according to one of the claims 2 through 6, in which a final quality indicator is calculated from the percentage increase in the quality indicator for the at least one other data transfer type.

8. Method according to one of the claims 2 through 7, in which the method further comprises the step of analysing the contribution of each of the at least one lower network layer performance indicator.

9. Method according to one of the claims 1 through 8, in which the predefined data transfer type specimen is a FTP download of a large size data file, e.g. 512 kByte.

10. Measurement system for determining a quality indicator for end-to-end data transfer in a wireless data network (1), comprising a data network analysis system (10) connected to the wireless data network (1) for measuring at least one lower network layer performance indicator using a predefined data transfer specimen, in which the measurement system (10) is further equipped with processing means (2) which are arranged for deriving the perceived quality indicator for at least one other data transfer type from the at least one lower network layer performance indicator.

11. Measurement system according to claim 10, in which the processing means (2) are arranged to execute the method according to one of the claims 2 through 9.